



PReserver Newsletter honored at DA Journalism Competition

Story by **Kathy Hayes**

Congratulations! Your PReserver Newsletter, a newsletter published by and for the USAR Environmental Division, has been awarded Honorable Mention for the Newsletter-Format Publication category in the Department of the Army MG Keith L. Ware Journalism Awards Competition.

The purpose of the MG Keith L. Ware Journalism Awards is to recognize excellence in print and broadcast journalism that support the Army's internal information program. The Secretary of the Army sponsors these competitions annually. Awards are made in 22 print and 19 broadcast categories with First, Second, Third and one Honorable Mention award possible in each category.

Judging for the 2002 Keith L. Ware Journalism Awards Competition was conducted March 5-6, 2003, in Alexandria, VA. A panel of 23 professionals from the commercial media, academia and Department of Defense community personnel reviewed 230 print and 80 broadcast submissions.

More print winners from the USAR are listed on page 8.

New and Improved NEPA Subcommittee

New website offers a wealth of information

Story by **The NEPA Subcommittee**



The National Environmental Policy Act (NEPA) Subcommittee met on February 5th and 6th, 2003 during the USAR Environmental Conference in Charleston, SC.

The first order of business was to elect new officials. Ravi Ajodah with the 77th RSC was nominated as the Chairperson, and Meline Skeldon with the 70th RSC was nominated as the Vice-Chair. Other members of the committee represent nine RSCs, two installations, and the IMA-ARD.

The committee discussed some of the pressing issues regarding NEPA compliance in the USAR and established goals and objectives. To better overall communication, the subcommittee created a NEPA website on the USAR Intranet system (see link below). A few of the things that the website offers include an online discussion forum, templates and checklists, general NEPA guidance documents, and information pertaining to

NEPA and USAR training exercises. In addition to the website, the subcommittee is currently working on a standard operating procedure (SOP) that would, among other things, be used to provide guidance on fulfilling NEPA requirements and better the communication between environmental and non-environmental staffs. Also, a monthly conference call is planned - check the website address below for details.

The NEPA subcommittee has been set up as a working group that will respond to changing needs and requirements of the USAR. For this reason, participation from all members is essential for its success. In addition, the subcommittee welcomes the participation of those who are not current members that would like to help achieve its goals and objectives. The idea is that through better communication and education of the NEPA process and requirements, the USAR would continue being stewards of the environment while still achieving mission success.

NEPA Homepage: <https://077ny023iis:8080/DCSENG/env/nepa/home.htm>



Large Scale Planning Level Survey and Predictive Models at Fort Dix, New Jersey

Story by **Peter Pagoulatos, Fort Dix Historic Preservation Officer**



Archaeological Excavations, 28-BU-526

Photos by Peter Pagoulatos

The primary purpose of this study is to present preliminary results of a large-scale planning level survey at the Fort Dix Military Installation. Since 1995, Fort Dix has undertaken a long-term cultural resource survey to inventory all archaeological sites for National Register (NR) eligibility. A research methodology has been initiated using standardized sampling units. Although the majority of field tests represent negative-based data, environmental attributes such as soils, slope, drainage, hydrology, topography, and wetlands are being measured using GPS/GIS technology; these data are being compared to documented archaeological site locations. This analytical approach has allowed Fort Dix to better manage land on the installation in relation to the Army training mission, with the ultimate goal of developing archaeological sensitivity assessments and corresponding predictive models.

The Fort Dix military installation encompasses nearly 31,000 acres and is located in south-central New Jersey. The installation is entirely located within the Pinelands National Reserve, an important ecological area designated by state and federal legislation. The Pinelands National Preserve totals 1.1 million acres, is composed of a patchwork of pine oak forests, streams, rivers, and wetlands, and stretches across southern New Jersey. This area, known locally as the Pine Barrens, is unique in its topography, geology, soils, water resources, flora and fauna.

The Fort Dix region was inhabited by Native American populations long before European colonization took place. Prehistoric human populations have occupied this unusual and diverse ecosystem during the last 12,000 years, in-

cluding Paleo-Indian, Archaic, Woodland and historic (Lenape) Delaware cultural groups. The Delaware Nation is the only federally recognized Native American tribe culturally affiliated with the installation today. Initial settlement of the present-day Fort Dix area by Euroamerican populations occurred by the mid-eighteenth century, with the establishment of agricultural settlements, mills, bog iron furnaces, and cranberry bogs; these subsistence and commercial activities produced small villages and cross-road settlements. The Fort Dix military installation was established in 1917.

BACKGROUND

The Fort Dix Historic Preservation Office (FDHPO) was established in 1995. The major purpose of the FDHPO has been to inventory all NR eligible historic properties at Fort Dix. The FDHPO has developed a long-term plan to identify, evaluate, prioritize, and manage archaeological resources at Fort Dix. Work is being fully coordinated with the New Jersey State Historic Preservation Office, the New Jersey Pinelands Commission, and the Advisory Council of Historic Places to ensure compliance with federal laws and regulations. Over the years, the Fort Dix cultural resource manager has developed several components which comprise the FDHPO. These components include the completion of Historic Preservation Plan (HPP) and Integrated Cultural Resource Management Plan (ICRMP) documents, as well as cultural resource inventories which are fully integrated as cultural resource data layers into the GIS system.

The Fort Dix HPP was completed in 1996, providing guidance for installation managers. The HPP then served as the basis for the ICRMP. In FY2000, the ICRMP was completed, providing for the management of 12,000 years of human cultural material remains within the current boundaries of the military installation. The ICRMP provides installation land managers with direct access to cultural resource management policy and procedures, is available in an interactive computer-based format, and incorporates GIS data. The ICRMP should ensure a cost-effective balance between the installation's mission requirements and the careful stewardship of Fort Dix's cultural heritage.

Native American Artifacts from
28-BU-526



ARCHAEOLOGICAL INVESTIGATIONS

Prior to the development of the FHDPO, no systematic base-wide site data collection had been performed. In 1996 and 1997, the FDHPO contacted avocational archaeologists from the general Fort Dix area to gather information on archaeological site occurrences within the boundaries of the installation; this project was conducted as part of the New Jersey Site Registration Program study directed by the FDHPO in cooperation with Brookdale College (Lincroft, N.J.). Student research assistants interviewed local avocational archaeologists and subsequently recorded all site data onto corresponding site registration forms. This procedure led to the identification of numerous prehistoric sites at Fort Dix, spanning the entire prehistory of the State of New Jersey. These data formed the basis of the subsequently developed planning level survey.

Since 1996, several cultural resource surveys have been initiated by the FDHPO, in advance of proposed project development and demolition undertakings at Fort Dix. The most prominent of these studies has been a long term planning level survey designed to inventory all NR eligible sites at Fort Dix. Ongoing planning level survey investigations have yielded several additional prehistoric and historic sites. The prehistoric sites represent stone tool and pottery scatters, reflecting tool manufacturing and domestic-related tasks, dating to at least 12,000 years before the present; the historic remains represented residential, commercial, and industrial-related sites dating from the late eighteenth to early twentieth centuries.

The planning level survey methodology uses standardized sampling units. Sampling units consist of 500-foot to a side block units; one-foot-diameter shovel tests have been placed at a 50-foot-interval grid within each block unit. Each block unit consists of 121 shovel tests. Using this approach, a stratified-random sample methodology has been implemented in areas of low (greater than 500 feet from water) and high (less than 500 feet from water) archaeological sensitivity. To date, 190 block units have been completed and evaluated.

As part of this study, all sites have been located using GPS technology; these points were then downloaded into the GIS and attributed by Fort Dix GIS staff. In all, 75 archaeological sites were identified with GPS; also, corresponding negative (control point) data was collected and entered into the GIS system, for comparative purposes. Subsequently, prehistoric archaeological sites and negative (control point) data were both evaluated against GIS data layers such as geology, topography, soils, lakes/streams, wetlands, and military training intensity zones.

Preliminary findings indicate that prehistoric archaeological resources are predominantly located on low divides in close proximity to large freshwater wetlands (145 feet) and perennial streams (545 feet), in oak-pine forests within the western portion of the installation. Conversely, relatively fewer prehistoric sites are situated in pine forests in the central and eastern sections of the installation. Negative-based (control point) data from these areas are usually located on upland divides, away from intermittent streams (900 feet) and small freshwater wetlands (2,200 feet). These data indicate that prehistoric site uses were primarily driven by large freshwater wetlands and permanent running water; soil drainage and surface slope were relatively less important. Future research will concentrate on comparing prehistoric site locations and negative-based (control point) data using statistical analyses, on the basis of watersheds.

CONCLUSION

Over the years, the FDHPO has continued to support the Fort Dix mission to respond in an effective and timely manner to the Army's requests for evaluation of training areas for potential cultural resources, as well as state and federally-compliant surveys for new construction and training projects, while ensuring that data from these surveys are incorporated into the archaeological and historical record of the State of New Jersey. The FDHPO has attempted to maintain the Army's standards and goals of land stewardship by completing high quality and useful research, and at the same time, meet the practical daily needs of a large military installation. Finally, the development of archaeological predictive models should assist the Army in better-managing installation lands in relation to the Army training mission, with the ultimate goal of developing archaeological sensitivity assessments and corresponding predictive models.

Environmental Innovation - Year 2002

The 99th outlines their projects and processes for environmental performance

Story by **John Pontier**

The 99th RSC is pleased to present our Year 2002 environmental innovations, the various non-traditional environmental programs, projects and processes that promote cheaper, faster and better environmental performance within our area of operation. This article provides our internal and external customers with an understanding of our accomplishments for 2002 and our priorities for the future.

The activities and accomplishments would not have been possible without the cooperation and assistance of our state and federal partners, and the support from USARC. Their support has been outstanding and is reflected in the success of our initiatives, which highlights the need for the Army to foster voluntary partnerships and encourage innovation. The 99th is already working on this approach so, in a sense, the future is now for the 99th RSC. Included is a brief discussion of our history, mission, four major functions, accomplishments, and future direction.

During 1996, the 99th RSC transitioned from three ARCOMs to one RSC, and environmental management support from host installations to a matrixed RSC facility management and environmental staff to champion the various traditional environmental programs. Since then our focus has evolved to include innovative environmental projects that prevent pollution and sustain our resources.

Our commitment is to “incorporate environmental stewardship into our day-to-day decision making and long-term planning processes as a fundamental and integral component of our mission, all activities and each functional area. Consequently, we strive to continuously improve our environmental management system to meet our environmental commitments.”

The 99 ARIM - DCSENG Environmental Division is the proponent for environmental innovation; however, commanders at all levels integrate environmental considerations into

their policies, operations and planning. This happens at all 99th RSC organizations and tenant units, including military, civilian, and contractor personnel. Environmental stewardship is everyone’s business.

Our four major functional areas are the traditional compliance, clean up, conservation and pollution prevention pillars.

Compliance

The objective is to comply with all applicable environmental laws and regulations using an environmental compliance audit process emphasizing pollution prevention as a means to achieve full and sustained compliance. We used a proven environmental compliance audit system to go “beyond compliance” with regulatory requirements to attain levels of environmental performance that benefit people, communities and the environment. The purpose is to promote new ways of achieving improved environmental outcomes, using metrics and an international system to focus the work and scarce resources in areas of the greatest environmental need. We worked with interested facility managers and other stakeholders to develop innovative approaches that could advance our nation’s environmental goals more effectively and efficiently than current regulatory and policy tools or procedures. Key was providing the opportunity for stakeholder input to help shape the final project. This included integrating clean up, conservation and pollution prevention projects to meet or exceed our environmental regulatory obligations.

Compliance highlights and accomplishments included:

- Environmental Management System implementation
- WINCASS/WEBCASS transition
- An integrated Regional Spill Contingency Plan
- Pennsylvania compliant waste oil Preparedness Prevention and Contingency Plan template
- Third party audits



Photos left:

A four acre parcel acquired from DLA which had been used for disposal of scrap wood, metal (far left) and tires (left) required clean-up.

- Used oil aggregation partnerships
- Focused unit environmental compliance officers training
- CESQG hazardous waste management exemptions
- Noise management program exemptions
- Stormwater “no exposure” exemptions
- Spill Prevention Control and Countermeasures Plan exemptions
- Eliminating all permit requirements in three states
- Completing 47 Class 1, 2 and 3 compliance projects since FY00

Clean Up

We restored environmental damage resulting from our past activities to reduce risks to human health and the environment. The restoration system was created in the mid-1980s because the EPA, states and DoD were looking for a way of ensuring that the public would have clean air, clean water, safe food and safe places to live, work and play. These strategic relationships are memorialized in CERCLA regulations. To attain a more strategic and flexible site characterization and risk assessment process, restoration partnership agreements ensued. So the 99th RSC entered into a simple, streamlined multi-site agreement with the State of Pennsylvania. The approach starts with good data and employs good science. Before we discussed priorities or planned activities, we worked with the state to evaluate the status of the environment emphasizing the identification of sources and causes of existing environmental conditions. With this information in hand, both the State and the 99th RSC directed activities to the priority areas. To provide focus and emphasis a senior manager was assigned to serve as the lead or champion for the State partnership.

Clean-up highlights and accomplishments included:

- The landmark Pennsylvania Multi-Site Agreement
- Site assessments
- Nike site restorations
- Underground storage tank clean closures
- Open dump closure and reclamation

Conservation

We planned our future activities to minimize environmental impacts and managed responsibly the irreplaceable natural

and cultural resources under our stewardship. This meant integrating the environmental consequences of proposed actions and alternatives into all levels of decision making, and conserving natural and cultural resources through effective environmental planning. It’s an innovative approach whose goals are to meet the needs of the present without compromising the ability of future generations to meet their own needs. It’s a multifaceted approach to achieve environmental improvement, economic development and positive social change. In its simplest terms, it means adding new considerations or dimensions to our everyday decisions as a society.

Conservation highlights and accomplishments included:

- Army Chesapeake Bay Program Steering Committee
- DoD Chesapeake Bay Program Quality Management Board
- Businesses for the [Chesapeake] Bay
- Low Impact Development stormwater retrofits
- Osprey habitat relocation
- Wetlands mitigation
- Integrated Natural Resources Management Plan
- Integrated Pest Management Plan

Pollution Prevention

Any practice that reduces or eliminates pollution prior to recycling, treatment or disposal is pollution prevention, or P2. It includes increased efficiency in the use of raw materials and energy. The 99th RSC actively formed voluntary partnerships, training, and outreach, which focused on eliminating pollution before it occurred. “An ounce of prevention is worth a pound of cure” is a familiar axiom of our everyday language and a theme that has application to the our overall pollution prevention strategy. We promoted the concept of P2 through numerous programs and efforts with emphasis on preventing, reducing or eliminating environmental problems at the source. The P2 staff was involved in activities including outreach, training, publishing and distributing P2 literature, and recognizing partners who have made significant contributions in reducing or eliminating pollution. P2 was applied to our regulatory efforts and non-regulatory activities.

Story continues on page 6

Photos right:
The open dump was cleared (right) and restored by creating new wetlands, a forest buffer and a wildflower meadow (far right)





Developing a Pest Management Program Process for the IMA-AR

Story by **Melvin Marks and George Gricius**

The IMA-AR is responsible for providing technical pest management support for the Army Reserve. In fulfilling this responsibility, we are working towards the development of a Pest Management Program process that implements Department of Defense (DoD) and Army pest management policies and procedures.

A primary program goal is to conduct on-site reviews of Installation and RSC pest management programs on a **three-year cycle**, with approximately one third of Installations and RSCs visited each year. On-site reviews planned for CY 2003 include visits to the 81st RSC, 90th RSC, 89th RSC, Ft. McCoy, 88th RSC, Ft. Devens RFTA, 94th RSC, 70th RSC and 96th RSC.

As part of our work, we are striving to track and facilitate the **annual review** and updating of Installation Pest Management Plans, the **continuous** review and approval of pest control, grounds maintenance and other contracts that involve or allow the use of pesticides, and the improved recording and reporting of pest management operations.

As part of this process, we will be closely monitoring the training, certification and accreditation of Installation and

RSC pest management personnel to ensure that we have adequately qualified field representatives to oversee the program. We will be assisting the Conservation program manager in reviewing and validating future project justification and funding requirements for the pest management program. Some of our current initiatives include the rewriting of pest management contracts to make them more performance-based in function, the implementation of new, more standardized procedures for the recording and reporting of pest management operations using a simplified electronic format, and the expansion of the self-help pest control program to include additional materials and methods that will reduce the need for certified applicators.

All of this will require good, continuing input from our Installations and RSCs. As a jump-start in this process, many of you will be asked to complete a questionnaire designed to determine where we currently stand with our pest management programs. Once this survey has been completed, we will be working closely with you to continually track your progress. If you have any questions concerning the overall status of your pest management programs, please contact either Mel Marks at (843) 824-2633 or Bill Bennett at (843) 559-4595.

Environmental Innovation, *continued from page 5*

A direct benefit of our P2 efforts has been the development of strong partnerships with states and other federal agencies, which has led to greater administrative flexibility and a cleaner environment. This has meant less greenhouse gases emitted, less materials land-filled and fewer pollutants and toxins entering our waterways.

P2 highlights and accomplishments included:

- P2 Integrated Process Team
- Virginia Pollution Prevention Partnership
- Maryland Pollution Prevention Partnership
- Pennsylvania Environmental Partnership
- Solvent parts washers elimination
- 96% hazardous waste reduction
- 43% solid waste diversion
- Green bulbs, alternative fueled vehicles, squeegees
- Shop towel laundering
- SPIRiT (LEED) bronze level facility
- Enviro-Fact sheets and Enviro-Mail
- Enviro-Superstar awards
- Over \$83K in cost savings

The 99th RSC Environmental Management System (EMS) embraces continual improvement and prevention of pollution. It is the culmination of efforts to institutionalize innovation, motivate others to improve, and compliment existing regulatory activities. We have learned that innovations in environmental management can be used to create strategic opportunities and competitive advantages while maximizing the health and productivity of our ecosystems and communities. When we apply an appropriate EMS, committed to compliance in a framework of review, documentation, maintenance and communication, our future commitments to superior environmental performance and continuous, incremental improvement for the near term include allocating resources for:

- Spills, drips and secondary containment,
- Stormwater management,
- Oil water separator closures or upgrades,
- Radon surveys, notifications and mitigation,
- More recycling where feasible,
- Unit Environmental Compliance Officer training and reference materials,
- Tank closures documentation, and
- Excess hazardous materials elimination.



EMS Awareness and Implementation Strategy

Implementation and Preparation for the Coming Year

Story by **Roc Tschirhart**

As most folks in the Army Reserve environmental field know, the Army's way of doing business is changing. Not only did the Installation Management Agency stand-up last October, but we are also on the verge of implementing the internationally-recognized environmental management system (EMS) standard, ISO 14001.

Executive Order (EO) 13148, "Greening the Government through Leadership in Environmental Management," requires Federal Agencies to implement an EMS. In response to this EO, the Army Action Memorandum on EMS, signed 13 July 2001 by Mr. Ray Fatz, Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational Health, directs the Army to adopt the ISO 14001 standard as a goal. The EMS policy intends for our EMS to be mission-enhancing, and for funding to begin in FY04.

While some RSCs have already begun the EMS implementation process, this year we in the Army Reserve are preparing for next year. Two major thrusts are occurring for us this year; EMS awareness training at RSCs and installations, and the development of an EMS implementation plan to include identifying needed resources that will support the implementation efforts. The awareness training consists of two levels of training. A two-hour Senior-level training is being given to the Commander's staff at RSCs and installations; and, an eight-hour class is targeted at the remainder of full-time staff. To date, training has been held at the 77th, 65th, and 90th RSCs. At the 90th RSC, the two-hour training was presented during their Commanders Conference to an audience of approximately 49, with four Generals present. We also plan to give the two-hour training at USARC HQ to the Deputy Commanding General, Major General Wilson, the Chief of Staff, Brigadier General Kelley, and his staff.

An ISO 14001 Lead Auditor accredited course is being offered at least twice this year for those who are interested. Although the title sounds like it is solely intended for those pursuing auditor competency, many participants include EMS management representatives and other members of the implementation team. The course gives a thorough understanding of the standard and how it applies to the organization. It also lets them know what the auditors

will look for during an audit. Other workshops, such as project management training, are being considered to build the competency of our management representatives.

Strategic planning and preparation will also consume much of our efforts this year.

During the Army Reserve Annual Environmental Workshop in Charleston, we identified most of the EMS management representatives for each RSC and installation. They make up a large part of the EMS subcommittee. At the workshop, five areas were highlighted as important activities to keep us moving forward:

- Establishing effective communication and collaboration via intranet, conference calls, and occasional workshops;
- Utilizing a project management approach;
- Identifying and developing needed resources;
- Resolving funding questions;
- Addressing needed changes in auditing processes to in corporate EMS.

Working through the EMS subcommittee will be key to making progress in these and other areas.

At the workshop, COL Richard Hoefert, the Director of Environmental Programs for the Army, presented Army internal deadlines as guidance toward meeting the EO requirements. These deadlines are as follows:

<u>Deliverable</u>	<u>Deadline</u>
Environmental Policy	30 Sep 03
Self-assessment	30 Mar 04
Implementation Plan	30 Sep 04
Prioritized list of Aspects	30 Mar 05
Training	30 Mar 05
Management Review	31 Dec 05

With these targets in sight, there are many things to do this year that will take the collective effort of many individuals. Since communication will be critical to the success of this effort, we will continue to have EMS-related articles in the PReserver.

An EMS subcommittee web site is currently under construction. Until it is ready for use, please refer to the DENIX web site for EMS. It shows EMS related material from all armed services. The address is:

<https://www.denix.osd.mil/ems>

Fort McCoy welcomes new Environmental Team Members

Fort McCoy is proud to announce new members to the Environmental Team. These new persons came on board on January 6, 2003, under the A-76 program. They bring over 55 years of combined environmental experience to assist in meeting the installation's training mission, while minimizing environmental impacts. The on-site team members include:

Craig Bartholomew -

On-site manager and professional geologist with over 14 years of environmental consulting experience.

Steve Miller -

Senior Environmental Engineer and professional engineer with 18 years of environmental consulting experience.

Tim Gelhaus -

Environmental Scientist with eight years of experience in environmental consulting and environmental compliance in the mining industry.

Aaron Yeager -

Environmental Scientist with nearly three years of experience with the Wisconsin Department of Natural Resources.

Dave Schafer -

Environmental Technician with eight years of experience in the Fort McCoy recycling and solid waste programs, and five years of hazardous waste handling experience in the Air Force.

The team works with Alan Balliett, the Chief of the Environmental Branch (photo below) to maintain compliance and preserve the environment at Fort McCoy.



Fort McCoy Environmental Chief takes a well-deserved break, after three grueling days of USARC meetings, to feed starving wildlife near affluent Pebble Beach.

News to You

A warm welcome...

for Mr. Roc Tschirhart (pronounced sheerhart) - he is the Environmental Management Systems Program Manager for the Army Reserve Directorate located at USARC headquarters. He is responsible for leading the implementation of the ISO 14001 EMS standard for the Army Reserve. Prior to this assignment, he spent two years at the Army Environmental Policy Institute, and was on the faculty at the Georgia Tech Research Institute where he worked on industrial environmental and management issues for 13 years. During his nine years involvement with ISO 14001 he has helped several organizations implement ISO 14001 and has taught extensively on the subject. He has been a certified EMS auditor for 4 years.

USAR Print Winners, continued from page 1

Metro-Format Newspaper

3rd Place: The Post, Fort Dix, N.J.

Field Newspapers

2nd Place: The Shield, 99th RSC Public Affairs Team

Special Achievement in Print Media

Honorable Mention: 77th Regional Support Command, Fort Totten, N.Y.

Where you can find the PReserver Newsletter available for access online:

USARC intranet site:

<https://usarcintra/dcsengr/environmental/pRESERVEr.html>

US Army Reserve website: <https://www.army.mil/usar/> and click on "outreach", then "environmental stewardship".

Army Environmental Center website:

<http://aec.army.mil/usaec/publicaffairs/news00.html>

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